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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/593,507	09/20/2006	Toshiyuki Masuda	10873.2262USWO	1334

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EXAMINER	
PIZIALI, ANDREW T	
ART UNIT	PAPER NUMBER
1794	

MAIL DATE	DELIVERY MODE
05/20/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/593,507	MASUDA, TOSHIYUKI	
	Examiner	Art Unit	
	Andrew T. Piziali	1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 March 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,6,7,9 and 10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,6,7,9 and 10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The amendment filed on 3/5/2009 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-3, 6, 7, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over any one of Applicant's Disclosure or WO 2003/071014 to Masuda (see English language equivalent EP 1479798) in view of any one of USPN 4,732,921 to Hochberg or USPN 4,079,034 to Lemper.

The applicant and Masuda each disclose that artificial hair fibers using fibers comprising polyester as the main component are know, but that there is a need in the art to produce the hair with flame retardancy (see page 1, line 18 through page 3, line 15 of the current specification and see entire document of Masuda including [0016] and [0017]).

Hochberg and Lemper disclose flame retardant polyester compositions obtained by melt-kneading 5 to 30 parts by weight of a bromine-containing flame retardant (B), such as tetrabromobisphenol A, tetrabromophthalic anhydride, or brominated epoxy resin, based on 100 parts by weight of a polyester (A) comprising polyethylene terephthalate, polypropylene terephthalate, or polybutylene terephthalate (see entire documents including column 4, lines 3-19 and Example A of Hochberg and column 3, line 20 through column 6, line 49 of Lemper). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the polyester hair from any suitable flame retardant polyester material, such as that disclosed by Hochberg or Lemper, because the polyester would possess flame retardancy and because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability and desired characteristics.

Regarding claim 3, Hochberg and Lemper disclose that the halogenated bisphenol can be a mixture of materials (paragraph bridging columns 3 and 4 of Lemper and column 5, lines 36-64 of Hochberg). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the bromine-containing flame retardant (B) from any suitable mixture of known materials, such as claimed, because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability and desired characteristics.

A patent for a combination, which only unites old elements with no change in their respective functions, obviously withdraws what is already known into the field of its monopoly and diminishes the resources available to skillful men. Where the combination of old elements performed a useful function, but it added nothing to the nature and quality of the subject matter

already patented, the patent failed under §103. When a patent simply arranges old elements with each performing the same function it had been known to perform and yields no more than one would expect from such an arrangement, the combination is obvious. **KSR v. Teleflex.**

Regarding claims 6 and 7, Hochberg and Lemper disclose that antimony trioxide and other antimony compounds may be added (column 6, lines 7-14 of Hochberg and column 6, lines 16-34 of Lemper).

Regarding claim 9, Masuda, Hochberg and Lemper disclose that the composition may comprise dye additives ([0079] of Masuda, column 6, lines 56-61 of Hochberg, and column 6, lines 6-15 of Lemper).

Regarding claim 10, Masuda discloses that the hair may have the claimed fineness ([0078]).

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over any one of Applicant's Disclosure or WO 2003/071014 to Masuda in view of any one of USPN 4,732,921 to Hochberg or USPN 4,079,034 to Lemper as applied to claims 1-3, 6, 7, 9 and 10 above, and further in view of USPN 4,916,013 to Maeda.

Maeda discloses that it is known in the artificial polyester hair art to use hair with a fineness of 30 to 70 denier (see entire document including column 3, lines 27-39). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the hair with a fineness of 30 to 70 denier, motivated by the expectation of successfully practicing the invention of applicant's disclosure and/or Masuda.

Response to Arguments

5. Applicant's arguments filed 3/5/2009 have been fully considered but they are not persuasive.

The applicant asserts that one of skill in the art would not have an expectation of success in making the combination of references because the references allegedly fail to teach or suggest the advantageous characteristics disclosed in the current specification. The examiner respectfully disagrees. The discovery of an undisclosed property of a known material does not provide a patentable distinction over the art of record.

The applicant asserts that there is no motivation to combine references because the secondary references disclose additional bromine-containing flame retardants in addition to the currently claimed bromine-containing flame retardants. The examiner respectfully disagrees. A patent claim can be proved obvious merely by showing that the combination of elements was obvious to try. When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product is not of innovation but of ordinary skill and common sense. **KSR v. Teleflex.**

In response to applicant's argument that the secondary references are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the references are in the field of applicant's endeavor which is flame retardant polyester material. In addition, the references are pertinent to the particular problem with which the applicant was concerned which is how to produce flame retardant polyester material.

Conclusion

6. Applicant's amendment necessitated any new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T. Piziali whose telephone number is (571) 272-1541. The examiner can normally be reached on Monday-Friday (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Tarazano can be reached on (571) 272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew T Piziali/
Primary Examiner, Art Unit 1794